

AMENDMENT TO THE CLAIMS:

Pending Claims:

At the time of the Office Action: 1-4, 17-20, 33-36, and 49-52.

As a result of this communication-1-4, 17-20, 33-36, and 49-52.

Currently amended Claims: 17.

New Claims: None.

Currently cancelled Claims: None.

Claim 1 (Previously presented): A method for encoding a motion video signal, the method comprising:

determining a desired size for a first frame of the motion video signal;

encoding the first frame of the motion video signal to form an encoded frame;

determining an encoded size of the encoded frame;

comparing the encoded size to the desired size;

adjusting an encoding parameter such that encoding the first frame according to the encoding parameter as adjusted would form a different encoded frame having a size closer to the desired size than the encoded size is to the desired size, and wherein the adjusting employs first and second adjustment mechanisms, the first adjustment mechanism comprising a pre-compensator and the second adjustment mechanism comprises a first encoding adjuster and a second encoding adjuster that is based at least in part on a damping factor which reduces overcorrection of the encoding parameter; and

encoding a second frame of the motion video signal according to the encoding parameter as adjusted.

1
2 Claim 2 (original): The method of Claim 1 wherein the second frame is
3 subsequent to the first frame in the motion video signal.
4

5 Claim 3 (original): The method of Claim 1 wherein the encoding parameter
6 is a numerical representation of a compromise between consumed bandwidth and
7 image quality of the motion video signal as encoded.
8

9 Claim 4 (original): The method of Claim 1 wherein the step of adjusting
10 comprises:

11 determining a difference between the encoded size and the desired size; and
12 adjusting the encoding parameter by an amount which is proportional to the
13 difference.
14

15 Claims 5-16 (canceled).
16

17 Claim 17 (Currently amended): A computer readable medium useful in
18 association with a computer which includes a processor and a memory, the
19 computer readable medium ~~including~~ having computer instructions stored thereon
20 which are configured to cause the computer to encode a motion video signal by
21 performing the steps of:

22 determining a desired size for a first frame of the motion video signal;
23 encoding the first frame of the motion video signal to form an encoded
24 frame;
25 determining an encoded size of the encoded frame;

1 comparing the encoded size to the desired size;

2 adjusting an encoding parameter such that encoding the first frame
3 according to the encoding parameter as adjusted would form a different encoded
4 frame having a size closer to the desired size than the encoded size is to the desired
5 size, and wherein the adjusting employs first and second adjustment mechanisms,
6 the first adjustment mechanism comprising a pre-compensator and the second
7 adjustment mechanism comprises a first encoding adjuster and a second encoding
8 adjuster that is based at least in part on a damping factor which reduces
9 overcorrection of the encoding parameter; and

10 encoding a second frame of the motion video signal according to the
11 encoding parameter as adjusted.

12
13 Claim 18 (original): The computer readable medium of Claim 17 wherein
14 the second frame is subsequent to the first frame in the motion video signal.

15
16 Claim 19 (original): The computer readable medium of Claim 17 where the
17 encoding parameter is a numerical representation of a compromise between
18 consumed bandwidth and image quality of the motion video signal as encoded.

19
20 Claim 20 (original): The computer readable medium of Claim 17 wherein
21 the step of adjusting comprises:

22 determining a difference between the encoded size and the desired size; and
23 adjusting the encoding parameter by an amount which is proportional to the
24 difference.

1 Claims 21-32 (canceled).

2
3 Claim 33 (Previously presented): A computer system comprising:
4 a processor;
5 a memory operatively coupled to the processor and
6 a motion video signal encoder which executes in the processor from the
7 memory and which, when executed by the processor, causes the computer to
8 encode a motion video signal by performing the steps of:

9 determining a desired size for a first frame of the motion video
10 signal;

11 encoding the first frame of the motion video signal to form an
12 encoded frame;

13 determining an encoded size of the encoded frame;

14 comparing the encoded size to the desired size;

15 adjusting an encoding parameter such that encoding the first frame
16 according to the encoding parameter as adjusted would form a different
17 encoded frame having a size closer to the desired size than the encoded size
18 is to the desired size, and wherein the adjusting employs first and second
19 adjustment mechanisms, the first adjustment mechanism comprising a pre-
20 compensator and the second adjustment mechanism comprises a first
21 encoding adjuster and a second encoding adjuster that is based at least in
22 part on a damping factor which reduces overcorrection of the encoding
23 parameter; and

24 encoding a second frame of the motion video signal according to the
25 encoding parameter as adjusted.

1
2 Claim 34 (original): The computer system of Claim 33 wherein the second
3 frame is subsequent to the first frame in the motion video signal.
4

5 Claim 35 (Previously presented): The computer system of Claim 33
6 wherein the encoding parameter is a numerical representation of a compromise
7 between consumed bandwidth and image quality of the motion video signal as
8 encoded.
9

10 Claim 36 (original): The computer system of Claim 33 wherein the step of
11 adjusting comprises:

12 determining a difference between the encoded size and the desired size; and
13 adjusting the encoding parameter by an amount which is proportional to the
14 difference.
15

16 Claims 37-48 (canceled).
17

18 Claim 49 (previously presented): A computer readable medium comprising
19 instructions which, when executed by a computer, performs the method of Claim
20 1.
21

22 Claim 50 (Previously presented) A method, comprising:
23 determining a desired size for a first frame of a motion video signal;
24 encoding the first frame of the motion video signal to form an encoded
25 frame;

1 determining an encoded size of the encoded frame;

2 comparing the encoded size to the desired size;

3 adjusting an encoding parameter such that encoding the first frame
4 according to the encoding parameter as adjusted would form a different encoded
5 frame having a size closer to the desired size than the encoded size is to the desired
6 size, and wherein the adjusting employs first and second adjustment mechanisms,
7 the first adjustment mechanism comprising a pre-compensator and the second
8 adjustment mechanism comprising a first encoding adjuster and a second different
9 encoding adjuster; and

10 encoding a second frame of the motion video signal according to the
11 encoding parameter as adjusted.

12
13 Claim 51 (Previously presented) The method of claim 50, wherein the pre-
14 compensator is operable to adjust the encoding parameter based on a degree of
15 change between the first frame and the second frame, and the first encoding
16 adjuster comprises a primary open loop rate control adjuster and the second
17 encoding adjuster comprises a secondary closed loop rate control adjuster, and
18 wherein a higher weight is given to the secondary closed loop rate control adjuster.

19
20 Claim 52 (Previously presented) The method of claim 51, wherein the
21 degree of change comprises an absolute pixel difference between the first and
22 second frames.
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